

Alcoholic
(1)

RECORDED

A.D. 1882, 11th May. N° 2236.

Alcoholic Beverage.

LETTERS PATENT to Johan Hern Loder of Leiden, Holland for an invention of IMPROVEMENTS IN THE TREATMENT OF CERTAIN MATERIALS FOR THE PRODUCTION THEREFROM OF AN IMPROVED ALCOHOLIC BEVERAGE.

PROVISIONAL SPECIFICATION left by the said Johan Hern Loder at the Office of the Commissioners of Patents on the 11th May 1882.

JOHAN HERN LODER, of Leiden, Holland, "IMPROVED BEVERAGE" ["IMPROVEMENTS IN THE TREATMENT OF CERTAIN MATERIALS FOR THE PRODUCTION THEREFROM OF AN IMPROVED ALCOHOLIC BEVERAGE"]

This Invention relates to an improved alcoholic beverage In carrying out my invention I proceed mainly as follows:—

The beverage is prepared by the fermentation of a solution of sugar or glucose and tartaric acid in the presence of red or Brazil, or yellow, or fustic wood and sorrel paste.

These red colouring matters are dispensed with in the preparation of white sparkling or distilled wine.

In manufacturing this beverage I prefer to use about 50 hectolitres of a liquid containing about 1000 kilogrammes of glucose, 5 or more kilogrammes of tartaric acid, 15 (more or less) kilogrammes of sorrel, in paste and say 25 kilogrammes of red or Brazil and yellow wood or fustic.—These proportions may be modified within certain limits, and the colouring matter may be employed in the form of extracts and the degree of alcohol and shade of color,—arranged according to taste.—The quality of the products depends upon the nature of the yeast employed.—Grape yeast is preferred but as this yeast is not to be obtained throughout the year other yeast may be employed such as Dutch yeast or the like.—The quantity of such yeast should not exceed $\frac{1}{10}$ of the weight of glucose and to this quantity is added one sixteenth of rye or other flour.—These two substances are made into a paste, which may be introduced into the glucose liquid either immediately or after allowing it to "rise" as in the case of dough.

A portion of yeast is taken at each operation to be employed in the next process.—After fermentation the product is treated in precisely the same manner as wine being submitted to heating and other processes and then placed in casks or bottles with the same care.—The refuse forms food for cattle, or can be otherwise utilized.

Loder's Improvements in Alcoholic Beverage.

SPECIFICATION in pursuance of the conditions of the Letters Patent filed by the said Johan Hern Loder in the Great Seal Patent Office on the 11th November 1882.

JOHAN HERN LODER of Lieden, Holland IMPROVEMENTS IN THE TREATMENT OF CERTAIN MATERIALS FOR THE PRODUCTION THEREFROM OF AN IMPROVED ALCOHOLIC BEVERAGE 5

This Invention relates to an improved alcoholic beverage

In carrying out my invention I proceed mainly as follows

The beverage is prepared by the fermentation of a solution of sugar or glucose acidulated by tartaric acid in the presence of red or Brazil and yellow or fustic wood and sorrel paste. The red colouring matters are dispensed with in the preparation of white, sparkling or distilled wine. Instead of sugar, those solutions may be directly employed from which sugar is made, and instead of glucose, may be used those substances which give glucosic solutions when treated by the ordinary processes employed in making alcoholic beverages or alcohol from amylaceous matters. Instead of red or Brazil wood those substances may be employed that give Resorcin when treated with alkali, but if they give primary phenols or primary phenolic acids they must not be employed. It is found advantageous to treat the red woods or their principles with nitric acid before adding them to the saccharated solution. Those substances may be employed instead of the yellow or fustic woods which give Phloroglucin or catechin when treated with alkali. If they give primary phenols or primary phenolic acids they must not be used. Instead of sorrel paste such substances may be used as give Orcin when treated with alkalines. If they give primary phenols or primary phenolic acids they must not be employed. The preferable form for the use of these colouring matters or their principles is that of an extract, and the relative proportions are arranged according to the degree of alcohol and the shade of colour or tint desired to be obtained. The maximum quantity of these substances to be employed is as follows: For 50 hectolitres of water; 1500 kilogrammes of glucose 15 kilogrammes of tartaric acid, 15 kilogrammes of extract of sorrel 15 kilogrammes of extract of red wood and 15 kilogrammes of extract of yellow wood. These colouring matters are simply mixed with the saccharated solutions, the method of treating being the same as is followed for the preparation of other alcoholic beverages obtained by fermentation. The quality of the product depends greatly upon the nature of the yeast—Grape yeast is preferred but as this is difficult to obtain throughout the year, other kinds such as Dutch yeast may be employed. The quantity of yeast should not exceed one sixteenth ($\frac{1}{16}$ th) of the weight of the glucose and to this is added enough rye or other flour to supply sufficient albuminous matter to the saccharated solution to ensure good fermentation. In order not to lose the amylaceous matters contained in the flour it may be first saccharafied by the ordinary process. It is not necessary to first work (fatiguer) the flour with the yeast before adding it to the solution.

A portion of the yeast is taken at each operation and retained for subsequent use. After the final fermentation the product is treated in a perfectly analogous manner to that employed for ordinary wines, being heated and otherwise treated and subsequently carefully placed in casks or bottles. The water employed for the red wines must not contain any amount of chloric salts, or salts containing chloric acid, while water containing iron is preferred for both red and white wines. The refuse arising in the manufacture of these alcoholic beverages may be used as food for cattle or otherwise utilized.

Loder's Improvements in Alcoholic Beverage.

Having thus described the nature of my invention and how the same may be employed I would have it understood that I do not claim those principles that are employed for the manufacture of beer, but,

What I do claim and desire to secure by Letters Patent is

- 5 The improvement in the treatment of the materials hereinbefore described, and their application for the production of an improved alcoholic beverage substantially as set forth

10 In witness whereof I the said Johan Hern Loder have hereunto set my hand and seal this tenth day of November in the year of Our Lord one thousand eight hundred and eightytwo.

J. H. LODER. (L.S.)

Signed, sealed and delivered }
in the presence of
Mr. M. P. DE HAAS. }

LONDON: Printed by GEORGE E. B. EYRE and WILLIAM SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

1882.